30/1/24

WEEK-7

```java
import java.util.Scanner;
class WrongAge extends Exception
{
    public WrongAge()
    {
        super("Age Error");
    }
    public WrongAge(String message)
    {
        super(message);
    }
}
class InputScanner
{
    protected Scanner s;
    public InputScanner()
    {
        s = new Scanner(System.in);
    }
}
class Father extends InputScanner
{
    protected int fatherAge;
    public Father() throws WrongAge
    {
        System.out.println("Enter the Father's age:
        fatherAge = s.nextInt();

        if(fatherAge < 0)
        {
            throw new WrongAge("Age
            cannot be negative");
        }
```

```java
        }

        public void display()
        {
            System.out.println("Father's
            Age: " + FatherAge);
        }
    }
    class Son extends Father
    {
        private int sonAge;
        public Son() throws WrongAge
        {
            super();
            System.out.println("Enter
            Son's age: ");
            sonAge = s.nextInt();
            if(sonAge >= fatherAge)
            {
                throw new WrongAge("Son's
            age cannot be greater than father's
            age");
            else if(sonAge < 0)
            {
                throw new WrongAge("
            Age cannot be negative");
            }
        }
        public void display()
        {
            super.display();
            System.out.println("Son's Age: " +
            sonAge);
        }
    }
}
```

```java
public class Age
{
    public static void main (String [] args)
    {
        try
        {
            Son son = new Son();
            son.display ();
        }
        catch (WrongAge e)
        {
            System.out.println ("Exception "
            + e.getMessage());
        }
    }
}
```

OUTPUT:

① Enter the father's age:
35
Enter Son's age:
-12
Exception: Age cannot be negative

② Enter the father's age:
40
Enter Son's age:
45
Exception: Son's age cannot be greater than father's age.